

BASIC PRINCIPLES OF FINANCIAL PLANNING IN EX-ANTE DEPOSIT INSURANCE SCHEMES

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Abstract

The paper explores main principles of financial planning in ex-ante deposit insurance schemes from a theoretical perspective and in terms of the EU Directive on deposit-guarantee schemes. Further on, the paper assesses how these principles and standards are used in financial planning in deposit insurance schemes around the world for annual budgeting, strategic planning and optimalization of available financial resources. After reviewing available references and different practices, the conclusion is that there are no clear internationally accepted principles for deposit insurers' financial planning, except some broad and general guidelines. Practices in the industry differ significantly. Given the fact that deposit insurance is in fact a monopolistic business, lack of clear principles and lack of proper financial planning may lead to inadequacy of ex-ante funds and negligence on the side of the management of deposit insurance schemes.

Keywords: deposit insurance, financial planning, ex-ante deposit insurance scheme

1 Introduction

Deposit insurance is a level of protection of deposits against bank failure established by regulation for. The purpose of deposit insurance is not to resolve banking crises, nor should it arouse any such expectations. Deposit insurance may be publicly or privately managed, involve narrow or broad responsibilities and roles in the overall financial safety net. Level and scopes of insurance differ among countries. The existence of deposit insurance may be institutionalized or it may be established as a smaller organizational unit in

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an existing regulatory body or government agency, but in any case the rules that govern its activities should always be clear in advance and prescribed in regulatory form. As in the insurance industry of the convention kind, the credibility of the insurer matters, even more so because depositors (i.e. those whose deposits are insured) do not have the ability to choose the insurer on the market. In other words, deposit insurance is a monopolistic business. Whatever goals, authority-given or management-chosen, a deposit insurance scheme (further: DIS) always has the same task – to repay depositors in failed banks in a short time in order to prevent panicky domino effects and to preserve the stability of the financial system in general, together with other market participants. However perfect regulation may be, and however much procedures may be in place, the most crucial time for any DIS is when there is financial distress on the horizon. If a deposit insurance scheme fails when it is in the spotlight the damage is huge and credibility cannot be restored easily. That is why the financial planning of adequate resources in the deposit insurance business is of great importance. It is a technical issue, more important from an operational perspective for the effectiveness of a DIS than from that of theory. But theory should provide, at least, some clear internationally accepted guidelines for sound financial planning practice.

From the theoretical perspective DIS financial planning is not an intriguing topic, and this has resulted in the paucity of references to that particular issue. Namely, there are number of references to discussions of general deposit insurance, its usefulness and burdens, the main characteristics of different models that may be found in practice, moral hazard and especially funding, from different perspectives¹, but there are no references dedicated solely to financial planning in deposit insurance.

The paper is not focused on the choice of funding in deposit insurance schemes itself, except in the part where funding and the regulatory solutions related to financial resources determine financial planning. Obviously, financial planning is particularly important in schemes where ex ante funding exists and where the fund is created in advance and needs to be properly managed. For the given reasons, the paper is concentrated on financial planning in ex-ante deposit insurance schemes. The main goal of this paper is to identify some main principles of financial planning in ex-ante deposit insurance schemes from a theoretical perspective in available references. Also, the paper explores the different existing financial planning in DIS business practice.

This paper is divided into three main parts. In the first part some concepts on financial planning arising from the chosen ex-ante funding from a theoretical perspective will be reviewed. The second part presents the EU perspective on financial planning issues. In the third part principles of financial planning in an ex ante DIS are addressed from the perspective of DIS practitioners, raising several important questions: (i) Are there enough resources in the fund? (ii) Should there be a target and how should it be set? (iii) What is the optimal size of the fund? (iv) What are optimal premiums for banks? (v) How should risks be assessed if a decision is made to do so?

As there are no internationally accepted financial planning standards for the deposit insurance industry, except for the broad and general guidelines that may be found in the

¹ See for e.g. Roy (2000), FDIC (2000), Laeven (2002), Frolov (2004), Šonje (2006) where different aspects of funding in DIS may be found.

available references to general topics about deposit insurance, financial planning practice differs among countries. When the framework is as broadly set as in this case, one can hardly argue that there is no link between these identified guidelines and the practices. But, given the size of the manageable funds in ex-ante schemes and the fact that deposit insurance is in fact a specific insurance business that deals with a number of risks, generally accepted financial planning standards should be developed and implemented.

2 Concepts of Financial Planning from a Theoretical Perspective

There are two basic types of DIS related to funding i.e. ex-ante and ex-post. Ex-ante DIS funding is a scheme where the regulator has decided to create up front a cash fund for the purpose of deposit insurance. The fund is created through different sources, for example from (i) initial capital at the time of the establishment of the Fund and membership fees by member institutions, (ii) regular and additional premiums paid by member institutions, (iii) additional resources like borrowing from the market and/or budget, as lender of last resort. Contrary, an ex-post DIS does not create any funds up front, but only when there is a need for a payout. There are many pros and cons for each funding model. Roy (2000) provides an overview of the characteristics of the two different funding schemes and a relative evaluation of the effectiveness and efficiency of each. He argues that ex-ante schemes are more effective but less efficient than ex-post deposit insurance schemes. When financial resources for deposit insurance are collected continually, a DIS is more liquid and ready for payouts when needed. Members pay premiums constantly at a time of prosperity as well as in times of recession. Premiums are paid by all member institutions not only those that have survived (which is the case of an ex-post DIS where resources are collected from surviving institutions in order to repay the deposits of a bankrupted institution). The existence of an ex-ante fund enhances depositor confidence. But, at the same time, the ex-ante fund must be managed, which increases operating costs compared to an ex-post DIS. Ex-post schemes do not impose an unnecessary burden on member institutions during periods without bankruptcies, because they do not have to make payments to the fund and money may be used more efficiently.

Traditionally, the main regular resource of any ex-ante DIS is the premium. Nevertheless, substantial amounts of resources may be ensured by establisher of the scheme at the beginning, as well as in exceptional circumstances such as banking crises. Premiums may be linear or differential. Premiums may be explicitly set in legislation as a percentage of some base such as total deposits, insured deposits, risk-weighted assets and similar, but some countries set only ceilings or ranges of annual premium in the national legislation, allowing in this way some flexibility in premium determination. Galac (2005) in his paper explains the economic and financial theory of the premium, as well as providing empirical evidence on the application of a risk-based premium.

One of the main prerequisites for the success of any DIS is liquid and adequate financial resources (if an ex-ante fund has been developed) or fast access to raise the funds (ability to collect ex-post premiums, additional funding from government or on the market i.e. back-up funding). In both cases, funds are needed on time. The only way to achieve liquid and adequate funding in practice is through careful financial planning. Financial plan-

ning in a DIS may have several meanings such as: budgeting for a year (“balancing future cash flows”), strategic planning (e.g. target funding) and, ideally, optimizing the size of the fund. When doing annual budgeting, a deposit insurance scheme forecasts its future cash flows. Annual budgeting in deposit insurance schemes is a simple projection of cash flow for next year. Such a projection starts with careful planning of all inflows and outflows for the next year on an item by item basis, taking into account all the determinants of the resources of the fund and the way it is used. Strategic planning is defined as mid and long term financial planning, which serve for determination of the targeted size of the fund. The target is usually set as percentage of the scheme’s potential liability for insured deposits or total deposits i.e. targeted coverage ratio. Coverage ratio is defined as ratio of available ex-ante funds to covered deposits (total deposits under insurance or total insured deposits i.e. total potential liability of the scheme). When setting the target size of its funds for e.g. 2% of insured deposits, a deposit insurance scheme uses its planning for fine-tuning available resources in line with the set target. The coverage ratio serves as a tool for testing DIS financial strength. It may be used to see which banks can be “covered” with available resources in the fund, for e.g. with a coverage ratio of 2% a deposit insurance scheme could pay out insured deposits simultaneously in x number of smallest banks or individually any bank except for e.g. y number of the largest banks. According to Garcia (1999) it is useful for a DIS to set targets in order to achieve and retain financial viability and avoid any financial deficiencies that may even lead to the insolvency of a DIS. She argues that setting an appropriate target demands: ... “a realistic assessment of the condition of the banking industry, the size and timing of the financial demands that are likely to be placed on the fund...” and the industry’s ability to pay the necessary premiums without prejudicing its profitability, solvency and liquidity. Although many countries set the target in the regulation, the truth is that only few of them really do any serious analysis before determining the target. Optimization of the fund’s size is the most advanced usage of the financial planning in any deposit insurance scheme. This means that financial planning is not only an analytical but also a strategic tool for the definition of what the size of the fund should be and how the liquidity needs of a DIS can be determined and structured. Optimization of deposit insurance through financial planning means that a DIS tries to achieve optimal fund size (not too big, not too small) through optimal financing.

Although the first deposit insurance schemes were established almost 70 years ago, there is no international regulatory body i.e. international standard-setter for deposit insurers around the world. Ex-ante DIS manage huge financial resources, contributed by members of the scheme and still there are no accepted principles for financial planning or financial management of such resources. Garcia (1999) identified a list of best practices in any scheme at normal times. Two of the items from her list – “pay depositors quickly” and “ensure adequate sources of funding to avoid insolvency” are, without any question, interrelated. These items may be identified as potential guidelines for establishing standards for operational practice. If there are delays in paying the depositors and if schemes are under-funded or insolvent, it will lead to departures from best practice. Garcia identified three practical issues that have to be resolved relating to adequate funding and they are: (i) to choose a funded or ex-post deposit insurance scheme, (ii) to determine the appropriate levels for premiums and the accumulated fund and (iii) to decide on back-up

funding from the government. Questions listed first and last are always defined in the early stage of existence of any DIS and prescribed in the regulation. But issues related to the appropriate levels for premiums and the accumulated fund are still enigmatic in many schemes. There are no rules which clearly describe how to determine the appropriate levels for premiums and especially desired size of the fund.

According to Financial Stability Forum (2001:26) “a DIS should have available all funding mechanisms necessary to ensure the prompt reimbursement of depositors’ claims after a bank failure”. Although this document was written by a group of deposit insurance practitioners from all around the world, they focused only on the issue from the regulatory prospective. This approach was meaningful at that time, when many schemes dealt with problems arising from poor regulatory solutions especially related with limited authorities given.

Roy (2000) gives an overview of funding issues and addresses optimal funding of a DIS providing the framework for analysis. He identified factors influencing the choice of ex-ante and ex-post schemes, as well as sufficiency of funding in DIS. According to Roy (2000:11), “to determine whether a given level of funding is sufficient, one needs to compare the potential needs or losses with the resources that will be available.” This simple sentence explains the substance of the purpose of financial planning in deposit insurance in order to determine adequate funds. Later on, the paper provides an overview how the issue is approached in the practice.

3 Financial Planning and Funding from EU Perspective

The European Union’s view on financial planning in DI is extremely important because it sets the general standards for regulators when framing DI regulation. For every EU member country has to set up domestic regulation within the framework given by European the Directive on deposit-guarantee schemes (1994:4) (further: EU Directive). That is why the EU Directive was able to take the responsibility of providing the substitute for the missing international set of standards for financial planning at least for countries in the European Union. However, the EU Directive provides only broad rules and misses the chance to take the lead in the position of standard-setter for adequate funding. The EU Directive does not prescribe financing of DI or the method of premium collection, although its articles represent an important deposit insurance regulatory framework for any EU member country. Nenovsky and Dimitrova (2003) provide an interesting overview of problems arising from obligatory compliance with this EU Directive for EU accession countries. They argue that because of the EU Directive the model of regulation that should fit to all EU member countries, there are some evidences of over-insurance in accession countries which could lead to increasing moral hazard and costs of banking in the whole European Union.

The preamble of the EU Directive states: “... it is not indispensable, in this Directive, to harmonize the methods of financing schemes guaranteeing deposits or credit institutions themselves, given, on the one hand, that the cost of financing such schemes must be borne, in principle, by credit institutions themselves and, on the other hand, that the financing capacity of such schemes must be in proportion to their liabilities; whereas this

must not, however, jeopardize the stability of the banking system of the Member State concerned.” The EU wants the issue of funding to be left to the responsibility of each DIS. But, the Directive also provides certain fundamental guidelines. The first one is that members have to pay for the deposit insurance. The second is that resources should be adequate to meet potential liabilities. A DIS should establish funding mechanisms that are in proportion with its liabilities. Both principles are similar to those found in other references mentioned in the paper, but are not deeper or more detailed.

While there were some discussions in the EU whether a revised Directive should be more precise in prescribing only ex-ante funding, appropriate coverage ratios and similar, it seems that these issues will stay as they are now.² That is, the European Commission was tempted to make substantial changes in the Directive, but such a challenging task has been postponed for the time being. There are no written documents providing any explanation of or reasoning behind such decision.

Table 1 provides an overview of funding schemes in EU countries.

Table 1 Funding in EU countries

Funding	Old members	New members	Total
ex-ante	8	8	16
combined	4	1	5
ex-post	3	1	4
Total	15	10	25

Source: Demircuc-Kunt, Karacaovali and Laeven (2005:35-38).

Ex-post schemes are in the minority in EU countries. Any serious conclusion about what type of scheme is better would be improper. Also, it is hard to identify the main reasons why the majority among EU countries have chosen ex-ante funding, although research into this particular issue would be interesting – to see the real reasons behind governmental decisions.

During the revision process in the EU the European Commission (2005:4), identified four categories of schemes in relation to funding: (1) schemes with high ex-ante funding: keeping a high level of available funds and a coverage ratio of 2% or more; (2) schemes with medium ex-ante funding: coverage ratio around 1%; (3) schemes with low ex-ante funding: coverage ratio less than 1% (80% of depositors in the EU are covered by such schemes) and (4) ex-post funding.

According to the European Commission’s Review of Directive (2005:5) the European Central Bank’s Banking Supervisory Committee, based on Moody’s financial strength rating had found that “there appeared to be no link between the financial strength of the national banking sector and the coverage ratios of the schemes.” This statement is result of

² Dirk Cupei during discussion and presentation at EFDI Conference on Deposit Insurance in Sarajevo, December 9th 2005.

the analysis of the EU schemes. The significant conclusion is that the financial strength of the members' banking sectors (or financial weakness) may not be taken into consideration as relevant when determining funding levels and funding mechanisms. This, also, means that risk assessment for the purpose of determination of financial exposure of deposit insurer was not taken into consideration as relevant for adequate funding. In other words, analysis showed that strategic financial planning in practice was rather poor and not based on the principles identified by Garcia relating to coverage ratios and setting the target size of the DI funds.

4 Financial Planning in Ex-ante Deposit Insurance Schemes from Practitioner Perspective

Like any other financial institution, every DIS should pay special attention to financial planning. Moreover, a DIS is concerned with a number of questions, such as: Are there enough resources in the fund? (ii) Should there be a target and how should it be set? (iii) What is the optimal size of the fund? (iv) What are the optimal premiums for banks? (v) How should risks be assessed if a decision is taken to do so? Proper financial planning helps in finding answers to all of these questions.

In practice, size and conduct of financial planning, as well as data used and methodology applied, differ significantly among deposit insurers. By definition, there is a difference in regular financial planning according to funding i.e. if there is an ex-ante, ex-post or combined DIS. Ex-post and combined schemes have to be focused on the risk of default i.e. bankruptcy and mechanisms for the fast collection of necessary resources. An ex-ante DIS is concerned about regular, constant collection and fulfilment of banks' legal obligations as related to premium collections. There are many other variations, especially if collection is in relation to the risk of each particular member of the scheme. Furthermore, financial planning differs if the law explicitly sets the premium level as a percentage of a defined base or if the law only prescribes caps (or ranges) for the annual premium allowing the DIS to determine each year a more appropriate level of premium. Criteria for determination of the annual premium may be set in the law itself or in the form of internal regulations. Financial planning differs and depends on the authority given to the DIS and availability of information needed for analysis and/or on the level and maturity of cooperation among safety-net institutions. Functions of financial planning will determine the planning process, too. If a DIS chooses to use financial planning for budgeting purposes only, the data used and approach taken will not be the same as in a DIS which is trying to optimize its fund and uses financial planning for strategic reasons. But it is of great importance that, whatever the approach used, a DIS should focus its financial planning efforts on the available resources in relation to risk, i.e. the potential outflow for deposit payout. This is the only way it can determine its adequate fund size and adequate financing needs. In order to assess the potential payout, a DIS must take into consideration the risks of the member institutions.

Based on how the financial exposure (potential obligation) of a DIS is defined, two different financial planning approaches may be distinguished. The most traditional approach in financial planning is focused on DIS potential outflow defined as the sum of all insured deposits (amounts that should be compensated to depositors) in banks that may go bankrupt. In order to determine total risks faced by a DIS, there is a need to assess the risk of failure

of any individual bank member of the scheme. Contrary to the traditional approach, the expected loss approach is focused on the final loss of the deposit insurance fund. Also, the expected loss approach is based on the assumptions that it is possible to differentiate equity needs from liquidity needs in deposit insurance. Capital needs may be related to regular financial resources that will not eventually be recovered in bankruptcy, which results in an ultimate loss for the DIS. Liquidity needs are defined as total amount that has to be compensated to depositors i.e. insured deposits. That is the reason why liquidity needs may be financed from debt instruments. Total financial resources needs may be assumed based on an optimal combination of capital and liquidity needs. The same approach is helpful in determination of the size of the fund, which does not have to be large as in the case of traditional approach, but only in proportion to the expected loss of the fund. In order to optimally structure liquidity and capital needs a DIS may use a number of financial instruments.³

4.1 Traditional approach in financial planning in an ex-ante deposit insurance schemes

Regulation itself may provide constraints on planning. This would be the case when law either explicitly sets the premium as a percentage of a determined base or when bank risk information needed is not available to the DIS.

Total available resources at one particular moment in time are calculated as the sum of total reserve-funds (already collected) + regular annual premium till the moment of bankruptcy + additional funds that may be collected if needed.

When using simple annual budgeting for financial planning, a DIS should at least forecast its future cash flows i.e. plan its inflows and outflows in a 2 to 3 year horizon. Table 2 is a simplified illustrative example of such a cash flow projection. The DIS calculates its total needed resources as the sum of insured deposits in banks that are estimated as capable of going bankrupt during that year. Risk may be assessed either directly by the DIS or by the supervisory institution.

The DIS from our example covers 15,000 Euro, has a legally prescribed annual premium of 0.5% on insured deposits as of the previous year. In order to do cash-flow projections from our example, the DIS has to make some assumptions, such as annual growth of deposits and insured deposits in order to determine its basis for premium calculation (in our example the assumption was 20% annual growth of insured deposits, based on present growth of deposits), percentage of expected recovery in bankruptcy, profit from investments (for e.g. 3% annually) and its operational costs. Even if the DIS does not take into account risk, cash flow projection helps to minimize “unpleasant surprises.” When planning the annual premium, if it is explicitly prescribed in the law, a DIS is limited by the fact that the amount that may be collected depends on the base for premium calculation, because a DIS cannot influence the percentage of the premium i.e. to increase it if there are higher needs. Usually, a DIS limited in its financial planning by regulation does not use risk assessment methodologies, because the two of them are contradictory. When planning total available resources, a DIS has to take into account all available financial resources, such as the additional premium as well. However, the projection of outflow may be com-

³ For details on this subject see Šonje (2006).

plete only when a potential liability is taken into account i.e. risk of default assumed and sum of all deposits eligible for compensation in banks identified as risky. If a DIS does not take the risk of the individual banks into the calculation, it “may hope” that its accumulated funds will be enough in the case of need and that information on such default will be known in time, in order to mobilize additional resources if needed. But, at the end of the day there is a question: how long may such an improvised approach survive?

Table 2 Illustrative example of a DIS cash-flow projection
(in million euro, except the coverage)

Items	2003	2004	2005	2006	2007
	<i>Actual figures</i>			<i>Projection</i>	
coverage, in 000 eur	15	15	15	15	15
<i>Resources</i>					
transferred from previous year at the beginning	55	51	69	85	105
bank annual premium, calculated on the insured deposits as of previous year 0.5%	10	12	15	18	21
profit from investment (average 3%)	1.9	1.9	2.5	3.1	3.8
expected recovery of claims from bankrupted banks (20%)	5	4			
Total resources	71.9	69.9	86.5	106.1	130.8
<i>Payments</i>					
operational costs and expenditures	0.5	0.7	1	1.5	2
compensation of depositors	20				
total outflow	20.5	0.7	1	1.5	2
year end balance	51.4	69.2	85.5	104.6	128.8
total deposits under insurance at the end of the year	4,500.0	5,400.0	6,480.0	7,776.0	9,331.2
total insured deposits at the end of the year	2,500.0	3,000.0	3,600.0	4,320.0	5,184.0
Exposure coverage ratio (Year end balance/total insured deposits), in %	2.06	2.31	2.38	2.44	2.48

Source: author's own calculation on illustrative figures

When regulations set a premium in a range (e.g. from 0.1% to 0.2%) or as a cap (e.g. up to 0.2%), a DIS is forced to apply more serious annual financial planning. If a DIS has properly developed methodology in order to calculate the adequate premium for each year, it may influence the level of its regular financial resources up to a certain limit (prescribed by the law). This approach is more flexible, because the DIS may increase or decrease premiums over time. That is, if a DIS used information about its total potential risk (based on risk of individual banks) in relation to its total funds, it would be in position to optimally adjust its total resources over time, either increasing them (if there is potential bankruptcy)

or decreasing them (if banking sector is safe and sound). DIS may use different methodologies (either developing its own methodology) or use risk assessment information shared by the supervisory authority (e.g. an early warning system). In both cases the final goal is to assess the probability of default by measuring credit risk. Different schemes use different methodologies in order to determine risk. Risk assessment models may be grouped as different rating-grades models and early-warning models. Among rating-grades models, the most commonly used are those employing some quantitative measures, either information collected on-site, off-site or from supervisory authority. Some schemes apply qualitative measures for e.g. CAMELS, but more and more schemes that develop their own methodology use combined measures (e.g. US, Canadian⁴ and French deposit insurance authorities whose rating model is called ORAP). Some countries (e.g. Germany, Netherlands, Italy) use peer group analysis or models based on financial ratios. Early warning systems develop models that calculate the probability of defaults of individual banks in the system.

Using the “risk-aware” approach, a DIS has the power to establish a relation between its resources and the risks posed by individual banks. So far, there was prevailing practice that schemes use risk assessment in financial planning relating to differential premiums (where premiums paid by individual banks are in relation to their individual risk), but using available information for optimalization of their total fund size. If DIS potential liability is not connected with its financial resources, the DIS will be either over-funded or under-funded. This is the reason why the optimal size of resources becomes more important. A risk-aware approach, in principle, indirectly indicates a higher riskiness of the banking sector system, especially in economic recession. Differential premium schemes have strong pro-cyclical character, because higher riskiness means higher premiums, but they are used as a tool for fighting moral hazard. However, because of pro-cyclicality, differential premiums may not be a primary tool in resolving moral hazard issues. Sound and effective banking supervision has more power in detecting and resolving moral hazard in the banking sector.

4.2 Expected (final) loss approach in financial planning in an ex-ante deposit insurance schemes

Expected loss approach (or sometimes called final loss) is a modern philosophy used for financial planning⁵. It has to be stressed that this approach has been explored during the last decade. It applies a definition of capital adequacy to the calculation (determination) of adequate resources of a DIS (optimal size of resources). This approach is significantly different from any traditional financial planning in deposit insurance, because it turns the focus of interest (and financial planning) on the expected loss for the DIS, not its nominal exposure (insured deposits) in the case of default.

If this is properly applied, a DIS may optimize the size of its resources according to expected (final) loss in the case of default in a certain bank(s). The cornerstone of this approach was to model the loss distribution of deposit insurance funds. The loss distribution may be used to evaluate the appropriate level of fund adequacy and reserving. The

⁴ On American and Canadian models see further FDIC (2000) Options Paper .

⁵ E.g., FDIC hired consulting company Oliver, Wyman and Company to develop the model (for further references, see: FDIC, 2000); similar model was explored and developed for Romania by the Convergence team.

first step in analysing DIS risk profile is to recognize that deposit insurance funds have contingent portfolios of credit risks. These portfolios consist of individual exposures to insured banks, each of which has some chance (probability) of causing a loss to the DIS. Such a portfolio is similar to, but not the same as, a bank loan portfolio. DIS exposure to individual banks can be summed to calculate a cumulative loss distribution.

The amount of total insured deposits still represents the liquidity need for DIS, but not all paid deposits would be lost i.e. non-recovered. For combining good collection management practice of the DIS with adequate bankruptcy regulation, a DIS may end with an expected loss (never collected from the bankrupted bank) that is significantly lower than nominal exposure i.e. total repayment to depositors.

In such a way, a DIS will recover most of its resources; only smaller portion is "lost".

Focusing on expected loss only, a DIS may use a number of different financial mechanisms for setting the optimal premium paid by banks and the optimal size of the funds i.e. focusing on long term strategic financial planning.

5 Conclusion

Deposit insurance is a specific business. On one hand it is like the corporate insurance industry; on the other hand it has governments as lenders of last resort. Deposit insurance, in performing its main task, is exposed to a number of risks, directly and indirectly, through the risks to which are its members exposed. As is established by the regulation, in most countries with obligatory membership, deposit insurance has the characteristics of monopolistic business. At present, there is no single standard-setter nor do internationally accepted general standards for financial planning exist. The result is that every DIS has its own understanding and practice of financial planning. There are some schemes that are satisfied with annual budgeting only. Some do not even apply risk assessment. Some try to optimize their funds in the long run. All of them have more or less the same goal: to compensate depositors up to a prescribed coverage in the case of bank failure. It is obvious that a DIS is not going to fulfil this task if there are not enough financial resources in the fund, in the case of ex-ante models. But, for reasons of credibility and prudence, it is necessary to assure adequate financial resources and adequate size of the funds to be able to meet the undertaken responsibility in the foreseeable future, not only at one particular moment of time. An adequate size in the deposit insurance fund and its liquidity are crucial issues for a deposit insurance authority in any country. If the fund is below the optimal level it cannot provide adequate protection. If the fund is above the appropriate level, it presents a burden to member institutions.

Reasons for the lack of clear and internationally accepted standards in deposit insurance practice may be partly understood, although not justified at all, by the fact that many deposit insurance schemes were established as public schemes, managed by governmental agencies, not run by industry professionals. This, given the fact of its monopolistic position, may lead to severe negligence on the side of the management of deposit insurers. These are the reasons why it would be necessary to establish internationally accepted financial planning principles that would be applied at an international level and adjusted according other characteristics and features of deposit insurance schemes. An individual

DIS should undertake proper financial planning and financial management appropriate to the size of the financial resources collected and take the responsibility for the failures and negligence if accepted standards are not followed. At the moment, it is hard to blame the schemes for poor financial planning practice, when they are consigned to individual biases for want of industry standards.

REFERENCES

Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes [online]. Available from: [<http://www.efdi.net/scarica.asp?id=21&Types=DOCUMENTS>].

Demirguc-Kunt, A., Karacaovali, B. and Laeven, L., 2005. *Deposit Insurance Around the World: A Comprehensive Database* [online]. Available from: [<http://ideas.repec.org/p/wbk/wbrwps/3628.html>]

European Commission, 2005. “Review of the Deposit Guarantee Schemes Directive 94/19/EC”. *Consultative Working Paper on DGS, EC, Internal Market and Services DG*, 14th July 2005.

Federal Deposit Insurance Corporation, 2000. *Options Paper* [online]. Available from: [<http://www.fdic.gov/deposit/insurance/initiative/OptionPaper.html>].

Frolov, M., 2004. *Funding Deposit Insurance: Designing Options and Practical Choices* [online]. Available from: [http://www.coe-econbus.keio.ac.jp/data/DP03-21_rev.pdf]

Galac, T., 2005. “Does Croatia Need Risk-Based Deposit Insurance Premia?” [online]. *Croatian National Bank's Survey*, S-10. Available from: [<http://hidra.srce.hr/arhiva/68/3767/www.hnb.hr/publikac/pregledi/s-010.pdf>].

Garcia G., 1999. “Deposit Insurance: A Survey on Actual and Best Practices” [online]. *IMF Working Paper*, WP/99/54. Available from: [<http://www.internationalmonetary-fund.com/external/pubs/ft/wp/1999/wp9954.pdf>].

Guidance for Developing Effective DIS, 2001. Financial Stability Forum.

Laeven, L., 2002. “Pricing of Deposit Insurance”. *World Bank Working Paper*, No. 2871. Washington, D.D.: The World Bank.

Nenovsky, N. and Dimitrova, K., 2003. “Deposit Insurance During EU Accession” [online]. *William Davidson Institute Working Paper*, No. 617. Available from: [<http://www.wdi.umich.edu/files/Publications/WorkingPapers/wp617.pdf>].

Roy J., 2000. *A Preliminary Analysis of Deposit Insurance Funding Issues*. Montreal, Canada: Ecole des Hautes Etude Commerciales.

Šonje V., 2006. From Risk-Assessment to Financial Instruments, Size and Pricing Considerations in Deposit Insurance [online]. Available from: [<http://web.world-bank.org/WBSITE/EXTERNAL/TOPICS/EXTFINANCIALSECTOR/0,,contentMDK:20939050~menuPK:2611471~pagePK:210058~piPK:210062~theSitePK:282885,00.html>].